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=> d his ful

     FILE 'REGISTRY' ENTERED AT 16:42:16 ON 21 APR 2005
                E DIPERCARBOXYLIC ACID/CN
                E DIPERGLUTARIC ACID/CN
L1              1 SEA ABB=ON  "DIPERGLUTARIC ACID"/CN
                E DIPERADIPIC ACID/CN
L2              1 SEA ABB=ON  "DIPERADIPIC ACID"/CN
                E DIPERPIMELIC ACID/CN
L3              1 SEA ABB=ON  "DIPERPIMELIC ACID"/CN
                E DIPERSUBERIC ACID/CN
                E DIPERSEBACIC ACID/CN
L4              1 SEA ABB=ON  "DIPERSEBACIC ACID"/CN
                E DIPERSUBERIC ACID/CN
L5              1 SEA ABB=ON  "DIPERSUBERIC ACID"/CN
                E DIPERAZELAIC ACID/CN
L6              1 SEA ABB=ON  "DIPERAZELAIC ACID"/CN
                E SODIUM SULFATE/CN
L7              1 SEA ABB=ON  "SODIUM SULFATE"/CN
L8              1 SEA ABB=ON  MAGNESIUM SULFATE/CN

     FILE 'HCAPLUS' ENTERED AT 16:45:10 ON 21 APR 2005
L9              1 SEA ABB=ON  ?EXOTHERMIC?(W)?CONTROL?(W)?AGENT?
L10       1422144 SEA ABB=ON  ?SOLID?(W)?PARTICL? OR ?POWDER? OR ?COLLOID? OR
                  ?CRYSTALLIN? OR ?TABLET?
L11         47714 SEA ABB=ON  L10 AND (?STABILIZ? OR ?SOLUBILIZ?)
L12             2 SEA ABB=ON  L11 AND (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR
                  (?DIPERGLUTARIC? OR ?DIPERADIPIC? OR ?DIPERPIMELIC? OR
                  ?DIPERSUBERIC? OR ?DIPERSEBACIC? OR ?DIPERAZELAIC?)(W)?ACID?)
L13          4459 SEA ABB=ON  L11 AND ((?ALKYL? OR ?CARBON?)(W)?CHAIN? OR
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L14             0 SEA ABB=ON  L13 AND ?DIPERCARBOXYL?
L15            39 SEA ABB=ON  L13 AND (?ALKALI? OR ?ALKALINE?)(W)?EARTH?
L16            89 SEA ABB=ON  L13 AND ?METAL?(W)?SALTS?
L17           118 SEA ABB=ON  L15 OR L16
L18             1 SEA ABB=ON  L17 AND ?EXOTHERM?
L19             3 SEA ABB=ON  L12 OR L18
L20            58 SEA ABB=ON  L13 AND (L7 OR L8 OR ?MAGNESIUM?(W)?SULFAT? OR
                  ?SODIUM?(W)?SULFAT?)
L21            99 SEA ABB=ON  L9 OR L12 OR L15 OR L18 OR L20
L22            79 SEA ABB=ON  L21 AND (PRD<20011029 OR PD<20011029)
L23            18 SEA ABB=ON  L22 AND ?CARBOXYLIC?(W)?ACID?   18 cits from CA Plus

     FILE 'MEDLINE, BIOSIS, EMBASE, JAPIO, JICST-EPLUS' ENTERED AT 17:04:06 ON
     21 APR 2005
L24            17 SEA ABB=ON  L21
L25            16 DUP REMOV L24 (1 DUPLICATE REMOVED)   16 cits from other d.b.'s
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L3             1 SEA FILE=REGISTRY ABB=ON  "DIPERPIMELIC ACID"/CN
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L8             1 SEA FILE=REGISTRY ABB=ON  MAGNESIUM SULFATE/CN
L9             1 SEA FILE=HCAPLUS ABB=ON  ?EXOTHERMIC?(W)?CONTROL?(W)?AGENT?
L10      1422144 SEA FILE=HCAPLUS ABB=ON  ?SOLID?(W)?PARTICL? OR ?POWDER? OR
                 ?COLLOID? OR ?CRYSTALLIN? OR ?TABLET?
L11        47714 SEA FILE=HCAPLUS ABB=ON  L10 AND (?STABILIZ? OR ?SOLUBILIZ?)
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                 OR L6 OR (?DIPERGLUTARIC? OR ?DIPERADIPIC? OR ?DIPERPIMELIC?
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L13         4459 SEA FILE=HCAPLUS ABB=ON  L11 AND ((?ALKYL? OR ?CARBON?)(W)?CHAI
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                 ?)
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L16           89 SEA FILE=HCAPLUS ABB=ON  L13 AND ?METAL?(W)?SALTS?
L17          118 SEA FILE=HCAPLUS ABB=ON  L15 OR L16
L18            1 SEA FILE=HCAPLUS ABB=ON  L17 AND ?EXOTHERM?
L20           58 SEA FILE=HCAPLUS ABB=ON  L13 AND (L7 OR L8 OR ?MAGNESIUM?(W)?SU
                 LFAT? OR ?SODIUM?(W)?SULFAT?)
L21           99 SEA FILE=HCAPLUS ABB=ON  L9 OR L12 OR L15 OR L18 OR L20
L22           79 SEA FILE=HCAPLUS ABB=ON  L21 AND (PRD<20011029 OR PD<20011029)
L23           18 SEA FILE=HCAPLUS ABB=ON  L22 AND ?CARBOXYLIC?(W)?ACID?

=> d ibib abs l23 1-18

L23  ANSWER 1 OF 18  HCAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         2003:309221  HCAPLUS
DOCUMENT NUMBER:          138:317139
TITLE:                    Stabilization of reduced coenzyme Q solution
                          with antioxidant or chelating agent for use
                          pharmaceutical preparations
INVENTOR(S):              Fujii, Kenji; Kawabe, Taizo; Sakamoto, Yoshitomo;
                          Hosoe, Kazunori; Hidaka, Takayoshi
PATENT ASSIGNEE(S):       Kanegafuchi Chemical Industry Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 6 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.          DATE
     --------------       ----   --------    --------------------     --------
     JP 2003119127         A2    20030423    JP 2001-312180           20011010 <--
PRIORITY APPLN. INFO.:                       JP 2001-312180           20011010 <--
AB   A method for stabilization of side-chain reduced coenzyme Q or
     the corresponding side-chain reduced hydroquinone solution with antioxidant
     or chelating agent, is disclosed.  EDTA (EDTA) and its salt,
     ethylenediaminediacetic acid and its salt, hydroxyimminodiacetic acid,
     hydroxyethyl EDTA and its salt, diethylenetriaminepentaacetic acid and its
     salt, nitrilotriacetate and its salt, triethylenetetraaminehexaacetic acid
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and its salt, dicarboxymethyl glutamate tetrasodium salt, dicarboxymethyl glycine, 1,3-propanediamine tetraacetic acid and its salt, 1,3-**diamino**-2-hydroxypropane tetraacetic acid and its salt, sodium gluconate, hydroxyethane disulfonic acid, nitrilo Tris, or phosphonobutane **tricarboxylic acid**, may be used as chelator. Vitamin E and its derivative, vitamin C and its derivative, probucol, lycopene, vitamin A, carotenoids, vitamin B and its derivative, citric acid and its derivative, flavonoid, polyphenol, glutathione, selenium, and **sodium thiosulfate** may be used as antioxidant. Superoxide dismutase, glutathione peroxidase, glutathione-S-transferase, glutathione reductase, catalase, ascorbate peroxidase, may be used alternatively. **Tablets**, capsules, soft capsules, or **powder** oral formulations of the reduced coenzyme Q are claimed. Use of nitrogen or inert gas, and low temperature in preparation or storage of those formulations is claimed. Use of those formulations as veterinary medicine for livestock and pets or health food, is claimed. **Stabilization** of reduced coenzyme Q10 in gelatine capsules against oxidation by citric acid, **sodium thiosulfate**, and ascorbic acid, is described.

L23 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:242149 HCAPLUS
DOCUMENT NUMBER: 138:276256
TITLE: Controlled release pharmaceutical compositions containing polymers
INVENTOR(S): Fischer, Gina; Bar-Shalom, Daniel; Slot, Lillian; Lademann, Anne-Marie; Jensen, Christine
PATENT ASSIGNEE(S): Egalet A/S, Den.
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003024429	A1	20030327	WO 2002-DK620		20020923 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1429739	A1	20040623	EP 2002-779224		20020923 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
US 2004234602	A1	20041125	US 2004-490308		20040623 <--
PRIORITY APPLN. INFO.:			DK 2001-1377	A	20010921 <--
			DK 2002-1044	A	20020703
			WO 2002-DK620	W	20020923

AB A method for controlling the release of at least one therapeutically, prophylactically and/or diagnostically active substance into an aqueous medium by erosion of at least one surface of a pharmaceutical composition The method

comprises adjusting the concentration and/or the nature of the ingredients making up the matrix composition in such a manner so as to obtain an approx. zero-order release of the drug from the pharmaceutical composition when subject to an in vitro dissoln. test as described herein. The composition comprises a matrix composition containing a polymer or a mixture of polymers that may be substantially water soluble and/or **crystalline**, an active substance and, optionally, one or more pharmaceutically acceptable excipients, and a coating. Typical polymers are PEG. The coating comprises a first cellulose derivative which is substantially insol. in the aqueous medium, and at least one of a second cellulose derivative which is soluble or dispersible in water, a plasticizer, and a filler. The active ingredient may be carvedilol. Stable solid dispersions of active substances having low water solubility are also disclosed. Thus, a composition contained PEG 64.6, carvedilol 30, and citric acid 5.4% by weight

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:242148 HCAPLUS
DOCUMENT NUMBER: 138:276255
TITLE: Controlled release solid dispersions containing carvedilol
INVENTOR(S): Fischer, Gina; Bar-Shalom, Daniel; Slot, Lillian; Lademann, Anne-Marie; Jensen, Christine
PATENT ASSIGNEE(S): Egalet A/S, Den.
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003024426	A1	20030327	WO 2002-DK621		20020923 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP 1429734	A1	20040623	EP 2002-776907		20020923 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK					
US 2005019399	A1	20050127	US 2004-490170		20040921 <--
PRIORITY APPLN. INFO.:			DK 2001-1375	A	20010921 <--
			DK 2001-1611	A	20011031
			DK 2002-1044	A	20020703
			WO 2002-DK621	W	20020923

AB A controlled release pharmaceutical composition for oral use comprises a solid dispersion of at least one therapeutical agent and/or diagnostic substance, which at least partially is in an amorphous form, a polymer that has plasticizing properties, and optionally, a **stabilizing**

agent, the at least one active substance having a limited water solubility, and the composition being designed to release the active substance with a substantially zero order release. The polymer is typically a polyethylene glycol and/or polyethylene oxide having a mol. weight of at least about 20,000 in **crystalline** and/or amorphous form or a mixture of such polymers, and the active substance is typically carvedilol. The composition may comprise a coated matrix, the coating comprising a first cellulose derivative which is substantially insol. in the aqueous medium, and at least one of a second cellulose derivative which is soluble or dispersible in water, a plasticizer, and a filler. Thus, a composition contained PEG 64.6, carvedilol 30, and citric acid 5.4% by weight The dissoln. profile corresponded to a zero-order release of carvedilol from the composition

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:133123 HCAPLUS
DOCUMENT NUMBER: 138:175939
TITLE: Disinfecting and cleansing system for contact lenses
INVENTOR(S): Mowrey-McKee, Mary Flowers; Sills, Marzenna Alicja
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
WO 2003013621	A1	20030220	WO 2002-EP8839		20020807	<--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM						
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR						
US 2003118472	A1	20030626	US 2002-210808		20020731	<--
EP 1416975	A1	20040512	EP 2002-794578		20020807	<--
EP 1416975	B1	20050126				
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK						
JP 2004537374	T2	20041216	JP 2003-518621		20020807	<--
AT 287735	E	20050215	AT 2002-794578		20020807	<--
PRIORITY APPLN. INFO.:			US 2001-310893P	P	20010808	<--
			WO 2002-EP8839	W	20020807	

OTHER SOURCE(S): MARPAT 138:175939

AB A system and a method for disinfecting and cleaning ophthalmic devices such as contact lenses is provided. The system involves the use of an active microbicidal solution generated just prior to use by the reaction of an iodide salt with hydrogen peroxide in the presence of a peroxidase. Such a system is particularly useful for disinfecting contact lenses. **Tablets** were prepared from horseradish peroxidase 300.0, subtilisin 8.0, lipase 2.0, sodium benzoate 7.4, KI 0.3, lactose monohydrate 63.0, citric acid 33.0, and K2CO3 47.0 mg/**tablet.**

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:595512 HCAPLUS
DOCUMENT NUMBER: 137:145669
TITLE: Methods of sterilizing with **dipercarboxylic acids**
INVENTOR(S): Singh, Waheguru Pal; Giletto, Anthony; Hitchens, G. Duncan
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002107288	A1	20020808	US 2000-733611	20001208
US 2002188026	A1	20021212	US 2001-52908	20011029 <--
PRIORITY APPLN. INFO.:			US 2000-733611	A3 20001208 <--

AB Dry **dipercarboxylic acid** material and methods of using dry **dipercarboxylic acid** particulates to form novel sterilizing solns. or liquid chemical germicides. The **dipercarboxylic acids** or organic diperoxygen compds. can be synthesized and isolated as solid **powders** with an extended shelf life. The **powders** are also soluble in water for quickly preparing liquid disinfectant solns., whenever and wherever desired, from a potable water source. The dry **dipercarboxylic acid** materials are selected from **diperglutaric acid, diperadipic acid, diperpimelic acid, dipersuberic acid**, and **diperazelaic acid.** Upon dissoln. into water, these compds. have demonstrated the ability to inactivate high nos. of spores, including sterilization of medical equipment in 10 min at room temperature The average dim. of zone of inhibition of **diperglutaric acid** at a concentration of 0.33% against Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli was 10 mm, while glutaric acid at 1% had no zone of inhibition.

L23 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:591656 HCAPLUS
DOCUMENT NUMBER: 137:145583
TITLE: Suspension of nanospheres of lipophilic active ingredients **stabilized** with water-dispersible polymers
INVENTOR(S): Simmonnet, Jean-Thierry
PATENT ASSIGNEE(S): L'Oreal, Fr.
SOURCE: Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228746	A1	20020807	EP 2002-290213	20020130 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

FR 2820320	A1	20020809	FR 2001-1438		20010202
FR 2820320	B1	20030404			
US 2002142017	A1	20021003	US 2002-60280		20020201 <--
JP 2002322016	A2	20021108	JP 2002-26962		20020204 <--
PRIORITY APPLN. INFO.:			FR 2001-1438	A	20010202 <--

OTHER SOURCE(S): MARPAT 137:145583

AB A **colloidal** suspension contained a continuous aqueous phase, nanospheres of lipophilic active ingredients having average particle size of 0.01-1 μm, a surfactant, and **colloidal** particles of a water-dispersible polymers having average particle size of 10-500 μm as **stabilizer.** A suspension contained N-**cholesteryloxycarbonyl**-4-**aminophenol** 3, soya lecithin 0.5, 6% aqueous suspension of AQ38S 20, and water q.s. 100%. There was no crystallization in the suspension after storage for 2 mo at 45°.

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:184867 HCAPLUS

DOCUMENT NUMBER: 136:236663

TITLE: Hair and skin compositions containing a dibenzoylmethane derivative and an α-alkylstyrene dimer

INVENTOR(S): Forestier, Serge

PATENT ASSIGNEE(S): L'Oreal, Fr.

SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002019979	A2	20020314	WO 2001-FR2655		20010823 <--
WO 2002019979	A3	20020815			
W: JP, US					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR					
FR 2813526	A1	20020308	FR 2000-11304		20000905
FR 2813527	A1	20020308	FR 2000-16791		20001221 <--
FR 2813527	B1	20040123			
EP 1367986	A2	20031210	EP 2001-963119		20010823 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR					
JP 2004526665	T2	20040902	JP 2002-524464		20010823 <--
US 2003165443	A1	20030904	US 2003-129483		20030319 <--
PRIORITY APPLN. INFO.:			FR 2000-11304	A	20000905 <--
			FR 2000-16791	A	20001221 <--
			WO 2001-FR2655	W	20010823 <--

OTHER SOURCE(S): MARPAT 136:236663

AB The invention concerns a cosmetic or dermatol. composition, for topical use, in particular for solar protection of the skin and hair. The invention is characterized in that it comprises in a cosmetically acceptable carrier: (a) 0.1 to 20 weight of a UV filter derived from dibenzoylmethane; and (b) 0.1 to 20 weight of a particular α-alkylstyrene dimer. The invention also concerns a novel method for enhancing the stability of at least a dibenzoylmethane derivative towards UV radiation which consists in associating

with said dibenzoylmethane derivative an efficient amount of at least a particular α-alkylstyrene dimer. A composition contained ethoxylated polydimethylmethylceylmethylsiloxane 2, phenyltrimethylsiloxanytrisiloxane 3, Witconol TN 8, drometrizole trisiloxane 2, butylmethoxydibenzoylmethane 2, an α-alkylstyrene dimer, 6, titanium oxide 3, glycerin 5, **magnesium sulfate** 0.7, preservatives q.s., and water q.s. 100 g.

L23 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:676712 HCAPLUS
DOCUMENT NUMBER: 135:246110
TITLE: Silicone compositions for VOC-free, non-flammable creams, pastes and **powders** to render nonporous surfaces water, soil and stain repellent
INVENTOR(S): Ludwig, Jerome H.
PATENT ASSIGNEE(S): Unelko Resource Development L.L.C., USA
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001066480	A2	20010913	WO 2001-US6695	20010302 <--
WO 2001066480	A3	20020131		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6432181	B1	20020813	US 2000-518033	20000303
CA 2400584	AA	20010913	CA 2001-2400584	20010302 <--
BR 2001008602	A	20021119	BR 2001-8602	20010302 <--
EP 1263903	A2	20021211	EP 2001-913240	20010302 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003525977	T2	20030902	JP 2001-565302	20010302 <--

PRIORITY APPLN. INFO.:
US 2000-518033 A 20000303 <--
WO 2001-US6695 W 20010302 <--

AB Silicone compns. consisting of a multiphase dispersion of a silicone, an acid, and a solid **stabilizer** are used for treating nonporous surfaces such as glass, porcelain, ceramic, polished or painted metal, plastic, glazed ceramic tiles, and the like, to render them water, soil and stain repellent. The silicone fluid is selected from polydialkylpolysiloxanes, **polyalkylpolyalkoxypolysiloxanes**, polyalkylhydrogensiloxanes, polyalkyarylpolysiloxanes, fluoro-substituted alkylpolysiloxanes, cyclic siloxanes, and combinations thereof, and copolymers thereof. The acid is selected from sulfuric acid, sulfurous acid, hydrofluoric acid, hydrochloric acid, hydrobromic acid, phosphoric acid, phosphorous acid, pyrophosphoric acid, nitric acid, hydrogen sulfide, iodic acid, periodic acid, chromic acid, sulfamic acid, fluorosilicic acid, chlorosulfonic acid, fluorosulfonic acid, ammonium bifluoride, **sodium bisulfate**, mono-, di- and

trichloroacetic acid, mono-, di- and trifluoroacetic acid, p-toluenesulfonic acid, benzenesulfonic acid, ethylsulfonic acid, methylsulfonic acid, ethylenedisulfonic acid, dodecylsulfonic acid, trifluoromethylsulfonic acid, **perfluoroalkylcarboxylic acids**, oleum, perfluoroalkylsulfonic acids, maleic acid, picric acid, trihydroxybenzoic acid, trinitrophenol and mixts. thereof. The solid **stabilizer** having a particle size of 5-50 μm is selected from mica, hydrocarbon waxes, polyethylene, polypropylene, polytetrafluoroethylene, phenolic resins, polyvinyl chloride, **crystalline** graphite, amorphous graphite, carbon black, silicas, boron nitride, carnauba wax, glass microspheres, ceramic microspheres, perlite, vermiculite, talc and combinations thereof. Volatile organic compound (VOC) free cream, paste, **powder** and solid compns. are provided by the inclusion of **stabilizers** in the silicone compns. Solventless silicone compns. provide numerous advantages and improved water/soil repellency qualities.

L23 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:300487 HCAPLUS
DOCUMENT NUMBER: 134:316124
TITLE: Method of producing submicron particles of biologically active agents such as proteins and peptides
INVENTOR(S): Costantino, Henry R.; Jaworowicz, Warren E.; Tracy, Mark A.; Beganski, Christopher P.
PATENT ASSIGNEE(S): Alkermes Controlled Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001028525	A2	20010426	WO 2000-US41308	20001018 <--
WO 2001028525	A3	20020502		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6284283	B1	20010904	US 1999-422751	19991021 <--
CA 2388653	AA	20010426	CA 2000-2388653	20001018 <--
EP 1221943	A2	20020717	EP 2000-984565	20001018 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003512316	T2	20030402	JP 2001-531355	20001018 <--
AU 761472	B2	20030605	AU 2001-21165	20001018 <--
US 2002028252	A1	20020307	US 2001-898524	20010703 <--
US 6428815	B2	20020806		

PRIORITY APPLN. INFO.:
US 1999-422751 A 19991021 <--
WO 2000-US41308 W 20001018 <--

AB Submicron particles of a biol. active agent, e.g., proteins and peptides, are prepared by atomizing using multifluid atomization of a dispersed system

comprising at least one biol. active agent and at least one solvent to produce droplets, freezing the droplets, and lyophilizing the frozen droplets to obtain microstructures capable of being further fragmented into submicron particles by techniques such as probe sonication. The submicron particles can be incorporated into sustained release compns. having a reduced initial release of biol. active agent. The sustained release compns. can be administered to a human or animal. For example, sustained-release compns. containing submicron particles of Zn-complexed recombinant human growth hormone were prepared using RG 502H. A reduction in the particle size of the drug **powder** results in reduction of initial release of drug from microparticles.

L23 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:129878 HCAPLUS
DOCUMENT NUMBER: 134:183489
TITLE: Composition for stable injectable liquids containing perfluorocarbons
INVENTOR(S): Roser, Bruce Joseph; Garcia De Castro, Arcadio; Maki, James
PATENT ASSIGNEE(S): Ronai, Peter M., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6190701	B1	20010220	US 1999-271204	19990317 <--
PRIORITY APPLN. INFO.:			US 1999-271204	19990317 <--

AB A composition for delivering a stable, bioactive compound to a subject comprising
a first component and a second component, the first component comprises microparticles of sugar glass or a phosphate glass containing the bioactive agent. The sugar glass or phosphate glass optionally includes a glass formation facilitator compound The second component comprises at least one biocompatible liquid perfluorocarbon in which the first component is insol. and dispersed. The liquid perfluorocarbon optionally includes a surfactant. For example, alkaline phosphatase was **stabilized** in a glass based on mannitol 33.3%, calcium phosphate 33.3% and degraded gelatin 33.3 %, spray dried as microspheres and stored at 55° either as the dry **powder** or as a suspension in perfluorodecalin. The enzyme microspheres suspended in perfluorodecalin show retention of close to 100% of enzyme activity for > 30 days at 55°.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:291176 HCAPLUS
DOCUMENT NUMBER: 132:302004
TITLE: Chemical mechanical polishing slurry system having an activator solution
INVENTOR(S): Mahulikar, Deepak
PATENT ASSIGNEE(S): Arch Specialty Chemicals, Inc., USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2000024842	A1	20000504	WO 1999-US24864		19991022 <--
W: JP, KR, SG					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
EP 1124912	A1	20010822	EP 1999-955147		19991022 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2002528903	T2	20020903	JP 2000-578398		19991022 <--
US 6447563	B1	20020910	US 1999-425358		19991022 <--
PRIORITY APPLN. INFO.:			US 1998-105366P	P	19981023 <--
			WO 1999-US24864	W	19991022 <--

AB This invention relates to a CMP slurry system for use in semiconductor device fabrication. The slurry system comprises 2 parts. The 1st part is a generic dispersion that contains only an abrasive and, optionally, a surfactant and a **stabilizing** agent. The generic dispersion can be used for polishing metals as well as interlayer dielecs. The 2nd part is a novel activator solution comprising ≥2 components selected from: an oxidizer, acids, amines, chelating agents, F-containing compds., corrosion inhibitors, buffering agents, surfactants, biol. agents, and their mixts.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:789410 HCAPLUS
DOCUMENT NUMBER: 123:179092
TITLE: Hair cleaning and/or care agent in effervescent **tablet** form
INVENTOR(S): Petritsch, Erich
PATENT ASSIGNEE(S): Austria
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9515745	A1	19950615	WO 1994-AT194	19941212 <--
W: AM, AT, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, CZ, DE, DE, DK, DK, ES, FI, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, SK, TJ				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AT 9302501	A	19980115	AT 1993-2501	19931210 <--
AT 404095	B	19980825		
AU 9511876	A1	19950627	AU 1995-11876	19941212 <--
AU 696093	B2	19980903		
EP 731687	A1	19960918	EP 1995-902709	19941212 <--
EP 731687	B1	20010307		
R: AT, BE, CH, DE, ES, FR, GB, GR, IE, IT, LI, NL, PT, SE				
AT 199493	E	20010315	AT 1995-902709	19941212 <--

US 5824629	A	19981020	US 1996-656265		19960626 <--
PRIORITY APPLN. INFO.:			AT 1993-2501	A	19931210 <--
			WO 1994-AT194	W	19941212 <--

AB A hair cleaning and care agent in **tablet** form comprises a basic substance which releases a physiol. acceptable gas, preferably CO2. The **tablet** comprises a combination of ≥1 carbonate, carbamate, and/or hydrogen carbonate, ≥1 solid-phase (preferably organic) acid, ≥1 hair- and skin-compatible solid surfactant, ≥1 agent effective on the hair and/or skin, and ≥1 **stabilizer** and/or **tableting** agent. Thus, **tablets** were prepared containing talc 5, cedarwood oil 0.8, NaHCO3-citric acid mixture (1:1.1) 56, Na lauryl sulfonate 33.6, allantoin 0.2, Octopirox 0.5, guar (hydroxypropyl)trimethylammonium chloride 1.2, and corn starch 2%.

L23 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:705311 HCAPLUS
DOCUMENT NUMBER: 123:92375
TITLE: Electrolysis of liquid wastes using a doped diamond anode to oxidize solutes
INVENTOR(S): Carey, James J.; Christ, Charles S., Jr.; Lowery, Stephen N.
PATENT ASSIGNEE(S): Eastman Kodak Co., USA
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5399247	A	19950321	US 1993-172514	19931222 <--
EP 659691	A1	19950628	EP 1994-203661	19941216 <--
EP 659691	B1	19980527		
R: DE, FR, GB, IT, NL				
JP 07299467	A2	19951114	JP 1994-320357	19941222 <--
JP 3442888	B2	20030902		
PRIORITY APPLN. INFO.:			US 1993-172514 A	19931222 <--

AB Solutes are oxidized to render the solution (e.g., photog. processing wastes including components such as antical 5, RA 3, RA 4, bleaching and fixing agents) more acceptable for discharge into the environment, by electrolyzing the solution with an anode comprising elec. conductive **crystalline** doped diamond.

L23 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:437289 HCAPLUS
DOCUMENT NUMBER: 121:37289
TITLE: **Exothermic controlling agents** for fly ash setting
INVENTOR(S): Onodera, Sho; Tsuji, Akiko; Nio, Tatsuya; Kitada, Yoshuki
PATENT ASSIGNEE(S): Nippon Oils & Fats Co Ltd, Japan; Idemitsu Kosan Co
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05310842	A2	19931122	JP 1992-115937	19920508 <--
PRIORITY APPLN. INFO.:			JP 1992-115937	19920508 <--

AB The agents contain polymers or their salts containing 10-100 mol% monomers with CO2H or anhydride groups of it.

L23 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:127379 HCAPLUS
DOCUMENT NUMBER: 116:127379
TITLE: **Stabilized** preparations containing the taste modifying protein curculin
INVENTOR(S): Kurihara, Yoshie; Shimada, Teiyu; Saitoh, Masako; Ikeda, Kenji; Sugiyama, Hiromu; Kohno, Hiroshige
PATENT ASSIGNEE(S): Asahi Electro-Chemical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 458307	A1	19911127	EP 1991-108286	19910522 <--
EP 458307	B1	19951018		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04027356	A2	19920130	JP 1990-131967	19900522 <--
WO 9117671	A1	19911128	WO 1991-JP672	19910520 <--
W: SU				
KR 9706122	B1	19970424	KR 1991-8162	19910520 <--
CA 2042911	AA	19911123	CA 1991-2042911	19910521 <--
AU 9177214	A1	19911128	AU 1991-77214	19910521 <--
AU 645563	B2	19940120		
IN 176437	A	19960525	IN 1991-DE434	19910521 <--
CN 1057169	A	19911225	CN 1991-103525	19910522 <--
AT 129127	E	19951115	AT 1991-108286	19910522 <--
US 5405641	A	19950411	US 1993-156676	19931122 <--
PRIORITY APPLN. INFO.:			JP 1990-131967 A	19900522 <--
			US 1991-701481 B3	19910516 <--
			US 1992-884056 B1	19920515 <--

AB Curculin-containing prepns. from fruit of Curculigo latifolia are **stabilized** by the addition of salts, organic acids, carbohydrates, **amino** acids, or proteins. C. latifolia fruit 10 kg were freeze-dried, extracted with 0.3M NaCl 12 L and the extract clarified and freeze-dried to give a crude curculin preparation Similar exts. were prepared in which the extractant addnl. contained. lactose 50 or glycine 25 and malic acid 5 g/L. Eating a lemon after placing aliquots of these exts. on the tongue resulted in the lemon having a strong to preferable sweetness; exts. prepared by methods of the prior art showed no significant effect upon the flavor.

L23 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:236962 HCAPLUS
DOCUMENT NUMBER: 110:236962
TITLE: Anhydrous antiperspirants containing **stabilizers** for perfume
INVENTOR(S): Park, Andrew Campbell

PATENT ASSIGNEE(S): Unilever PLC, UK; Unilever N. V.
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 274267	A1	19880713	EP 1987-311313	19871222 <--
EP 274267	B1	19920722		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
CA 1306198	A1	19920811	CA 1987-554272	19871214 <--
AU 8782811	A1	19880623	AU 1987-82811	19871218 <--
AU 602039	B2	19900927		
ZA 8709566	A	19890830	ZA 1987-9566	19871221 <--
BR 8706984	A	19880726	BR 1987-6984	19871222 <--
AT 78393	E	19920815	AT 1987-311313	19871222 <--
ES 2033890	T3	19930401	ES 1987-311313	19871222 <--
PRIORITY APPLN. INFO.:			GB 1986-30723 A	19861223 <--
			EP 1987-311313 A	19871222 <--

AB Liquid or solid antiperspirants comprise a finely divided **powder** antiperspirant, an anhydrous liquid or solidified liquid medium comprising anhydrous EtOH and/or i-PrOH, a perfume-**stabilizing** agent chosen from compds. with a basic N and/or O functionality. The fragrance of the antiperspirant is preserved by the addition of the **stabilizer.** The **stabilizer** also inhibits dissoln. of the antiperspirant, which results in greater antiperspirant efficacy especially in roll-on deodorants. A saturated anhydrous ethanolic urea solution containing 25% REZAL 36P (aluminum zirconium trichlorohydrate) containing 0.011 M Al after 48 h, whereas a similar solution lacking urea conductivity 1.376 M Al. An ethanolic lotion containing REZAL 36GP and 5% urea improved the stability of 2 com. perfumes in the lotion after 1 mo storage at 37°. An antiperspirant containing REZAL 36 GP 25, anhydrous EtOH 60.8, Bentone 38 10.0, perfume 1.0, and urea 3.2% reduced sweat by 58% in human subjects.

L23 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1982:8529 HCAPLUS
DOCUMENT NUMBER: 96:8529
TITLE: Detergent bleach compositions
INVENTOR(S): Postlethwaite, Dennis
PATENT ASSIGNEE(S): Unilever N. V., Neth.; Unilever PLC
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 37146	A1	19811007	EP 1981-200323	19810324 <--
EP 37146	B1	19840613		
R: AT, BE, CH, DE, FR, GB, IT, NL, SE				
US 4325828	A	19820420	US 1981-244499	19810319 <--

CA 1158129	A1	19831206	CA 1981-373383	19810319 <--
ZA 8101958	A	19821027	ZA 1981-1958	19810324 <--
AT 7929	E	19840615	AT 1981-200323	19810324 <--
AU 8168751	A1	19811001	AU 1981-68751	19810325 <--
AU 541910	B2	19850131		
ES 500719	A1	19820916	ES 1981-500719	19810325 <--
JP 56149499	A2	19811119	JP 1981-44687	19810326 <--
JP 60011079	B4	19850322		

PRIORITY APPLN. INFO.:

GB 1980-10318	A	19800327 <--
GB 1980-19605	A	19800616 <--
EP 1981-200323	A	19810324 <--

AB The detergent bleach compns. contain Na perborate (I), a solid organic peroxy acid, and a **stabilizing** sequestering agent and are useful for bleaching stained fabrics at 40-80°. The peroxy acid is diperoxyazelaic acid (II) [**1941-79-3**], diperoxyadipic acid [**5824-51-1**], triperoxytrimesic acid [63556-80-9], diperoxyisophthalic acid [1786-87-4], or a similar acid. The sequestering agent is [(HO)2P(O)CH2]2NCH2CH2NHCH2P(O)(OH)2 (III) [1898-63-1], [(HO)2P(O)CH2]2NCH2]2 [1429-50-1], [[(HO)2P(O)CH2]2NCH2CH2]2NCH2P(O)(OH)2 [15827-60-8], [(HO)2P(O)]2CMeN(CH2CO2H)2 [55339-20-3], [o-(HO)C6H4CH(CO2H)NHCH2]2 [1170-02-1], or a similar compound Thus, a **powdered** laundry detergent was mixed with I 10, II 5, and III 0.2% to prepare a detergent bleach composition

L23 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1959:83380 HCAPLUS
DOCUMENT NUMBER:	53:83380
ORIGINAL REFERENCE NO.:	53:15048e-i,15049a-i,15050a-i,15051a
TITLE:	Utilization of furfural as initial substance in the plastic industry
AUTHOR(S):	Moshkin, P. A.
SOURCE:	Voprosy Ispol'zovan. Pentozansoderzhashchego Syr'ya, Trudy Vsesoyuz. Soveshchaniya, Riga (**1958**), Volume Date 1955 225-54
DOCUMENT TYPE:	Journal
LANGUAGE:	Unavailable

AB The process of continuous hydrogenation under pressure was carried out in an apparatus in which H was introduced into a receiver working under 0.5-atmospheric excess pressure; upon increasing the pressure above a determined value, the feeding line closed automatically, and when the pressure fell to 0.1 atmospheric, the compressor also stopped automatically, forcing H into 2 buffers at 400 atmospheric; one of the buffers served to feed H to the continuously working device mounted separately; the substance to be hydrogenated was forced into the mixing 3-way pipe by means of a high-pressure pump and H was introduced from the buffer; the mixture was directed into 2 0.5-1. tubes filled with suitable catalysts and fitted with a 3-zone elec. furnace (manometers and heat gages were installed at different points); the product, after passing through the reactor, was cooled in a condenser and collected in a receiver-separator out of which H entered the atmospheric through a throttle valve and a gas counter; the hydrogenation product also passed through a throttle valve into a collector at atmospheric pressure. A continuous process for obtaining furyl alc. (I) was developed by using the above apparatus in which Cu chromite, **stabilized** with **alkaline earth** metal oxides, was used as a catalyst. This catalyst was

also found to be most suitable for the hydrogenation of **carbonyl** groups or in similar cases, e.g., the hydrogenation of hydroxyvaleric aldehyde in pentanediol (in this case, by a batch process). The hydrogenation of furan (II) to yield tetrahydrofuran (III) was carried out by introducing it together with H in the tubular reactor filled with skeletal Ni; heating was accomplished by circulating a liquid heated to constant temperature (aqueous ethylene glycol (IV) with a constant b.p.). The continuous process of hydrogenation of nitriles into amines (e.g. the dinitrile of adipic acid) was carried out to give 85% basic products on skeletal Co, in MeOH saturated with NH4OH. The yield of nitrites prepared from chlorides by the action of alkali metal cyanides was increased by working at atmospheric pressure, but by using high-boiling solvents, e.g., aqueous glycol for the preparation of dinitriles from dichlorobutane (V) and dichlorodibutyl ether (VI), adiponitrile in the preparation of chlorovaleronitrile, and glycerol in the synthesis of the nitrile of hydroxycaproic acid. In all cases the yield was remarkably increased. The esterification of chlorides for obtaining the complex esters required in the plastic industry was used successfully with salts of fatty acids. Furfural (VII) obtained from the peat industry was quite unsuitable for the synthesis of "semi-products." VII obtained from the hydrolysis of resinous wood was not used either, owing to the presence (even in small quantities) of compds. of the terpene series which cause the formation of resins. The hydrogenation of VII into tetrahydrofuryl alc. (VIII) was carried out in 2 stages, and satisfactory results were obtained at 95-100°, under a pressure of 100 atmospheric, and a volume rate of 0.12-0.3, during 350 hrs.; under these conditions the moist product contained 97-8% I and the content of VII did not exceed 0.2%. I was then converted into VIII (yield 78%) by the batch process at 130-5°, under a pressure of 100 atmospheric with Ni on Cr oxide as the catalyst, or by the continuous process at 120-5°, 100 atmospheric, with Ni on Cr oxide, and a volume rate of 0.2. The crude hydride was obtained in a 100% yield (on the weight of I) and contained 90% VIII and 0.2-0.3% I. VIII, b. 177-8°, d. 1.050, n 1.4502, was mostly used in further syntheses: VIII with SOCl2 in the presence of C5H5N yielded 75% tetrahydrofurfuryl chloride (IX), b7-8 37-8°, d20 1.1112, n20D 1.4556. IX with NaNH2 in liquid NH3 yielded 65% 4-pentyn-1-ol (X), b9 47°, d20 0.9132, n20D 1.4455, **hydroxyl** number 19.7. X in the presence of CuCl and NH4Cl was oxidized in an aqueous solution of O of the air into 95% 4,6-decadiyne-1,10-diol which in its turn, with Raney Ni catalyst at room temperature and atmospheric pressure yielded 1,10-decanediol in a quant. yield; the oxidation of this diol with HNO3 yielded 80% sebacic acid. The dehydration and the simultaneous isomerization of VIII carried out at 340-60° over activated Al2O3 (obtained by treating γ-Al2O3 with HNO3 and heating 4 hrs. at 450°) with a volume rate of 1.23 yielded 85% dihydropyran (XI), b760 86°, d20 0.923, soluble in H2O (3% at room temperature) and in most organic compds. XI reacted easily with various substances like alcs., glycols, mercaptans, organic acids, and added Cl, H, HCl, COCl2, or H2O; in the presence of traces of mineral acid XI with VIII yielded 85% product, b15 124-6°, d20 1.046, n20D 1.4591, a selective solvent of a few inorg. compds., and yielded with IV a liquid, b12 187-8°, d20 1.073, n20D 1.4622. XI heated with H2O at 50° in the presence of traces of mineral acid yielded 87% δ-hydroxyvaleric aldehyde (XII), b2 51-2°, d20 1.053, n20D 1.4510, soluble in H2O. XII hydrogenated over Cu-Cr catalyst at 130° under a pressure of 150 atmospheric yielded 92% 1,5-pentanediol (XIII), odorless viscous liquid, b3 119-20°, d20 0.989, n20D 1.4470. XI under a

pressure of 40-60 atmospheric and at 110-15° in the presence of Ni over Cr oxide yielded 95% of tetrahydropyran (XIV), b760 87-8°, d20 0.881, n20D 1.4211, soluble in H2O (approx. 95% at 20°). In the vapor phase, the hydrogenation of XI under atmospheric pressure and at 120-30° with a volume rate of 0.2-0.25 over skeletal Ni yielded only 85% XIV. XIV with SOCl2 at 105-10° in the presence of ZnCl2 yielded 50-55% 1,5-dichloropentane (XV) accompanied by much resin formation. XIV boiled with AcCl, 5 hrs., yielded 93-5% chloropentanol (XVI) acetate, b15 100-3°, d20 1.053, n20D 1.4360, which on being reesterified with MeOH yielded 94% of XVI, b12 98-9°, d20 1.049, n20D 1.4510. XVI with SOCl2 at 130° yielded 80% XV, b14 69-71°, d20 1.093, n20D 1.4530; this roundabout way permitted increasing the yield of XV to 72% calculated on XIV. The action of cyanides and alkali metals on XVI at 125° in aqueous glycerol, 2 hrs., yielded 85% of the nitrile of hydroxycaproic acid, b20 150-2°, d20 0.970, n20D 1.4470, which was reduced in a NH4OH-alc. solution at 50° and 50-70 atmospheric with Raney Ni as catalyst to yield 73% **aminohexanol**, m. 50-1°, b5 118-20°. XIV oxidized by HNO3 (d. 1.32) at a temperature below 25° yielded 87% glutaric acid, m. 97.5°, soluble in H2O and alc. The action of Ac2O on VII in the presence of AcOK at 135-40° yielded the K salt of furylacrylic acid (XVII); the K salt in its turn yielded 65% XVII, m. 139.5°, acid number 401. Acetaldehyde was condensed with VII in 1% NaOH at 30° to yield 80% of the anhydride of XVII, m. 49-50°, b10 95-102°, which could not be oxidized to give the acid. A dry current of HCl was passed into an alc. solution of XVII at 100° to yield the ester of oxopimelic acid (XVIII). Other esters (di-Et, di-Pr, di-Bu) were also obtained. The esters of XVIII saponified more easily in an alkaline medium than in an acid medium. The synthesis of II consisted in the removal of a **carbonyl** group from the mol. of VII at 400-20° over a mixture of the oxides of Zn, Cr, and Mn in molar ratio 7:5:1 (mixed with graphite in the form of 4 + 4 mm. **tablets**) with a volume rate of 0.3; simultaneously with VII water/vapor was added in the ratio 1:2.5; the reaction mixture contained CO2, H, and 95% II; the catalyst lost its activity after 50-5 hrs. and had to be regenerated; this was done in the same apparatus by blowing air 5-6 hrs. at a temperature not above 550°, and a subsequent treatment with H. II was hydrogenated by bringing the reaction mixture (without any previous separation) over molten Ni catalyst at about 120° with a volume rate of 0.12, and cooling in Dry Ice to yield 90% III. After the separation of IV by simply cooling with H2O, the gases were recirculated. VI formed an azeotropic mixture with H2O (b. 63°) and contained 95% III. The ring of III was opened rather easily by the action of AcCl at 50°, upon cooling, to give 90% chlorobutanol acetate, b3.5 72-5°, d20 1.0852, n20D 1.4360; this, treated with AcOK at 160-70° yielded butanediol diacetate (XIX), b. 230°, d20 1.0460, n20D 1.4220. XIX could also be obtained in a 62% yield directly from III by the action of Ac2O in the presence of H2SO4 at 93° (the temperature gradually rising to 145°) and the subsequent distillation of the excess Ac2O and AcOH formed. XIX reesterified with MeOH in the presence of a small amount HCl (3% on alc.) at 65-70° yielded AcOMe and 90% butanediol (XX), m. 18.5°, b760 230°, d20 1.021, n20D 1.4460. The opening of the ring of III in the continuous process by the action of SOCl2 and CoCl2 at 100-2° yielded 30-80% V, b13 48-50°, d20 1.128, n20D 1.4520, and 60-14% dichlorobutyl ester, b13 126-8°, d20 1.0747, n20D 1.4568. V with alkali metal cyanides was converted at 140° in an aqueous solution (85%) of IV in the presence of a small amount of KI into 81%

adiponitrile, d20 0.9531, n20D 1.4340, which by saponification in an alkaline or an

acid medium yielded 85% adipic acid, m. 150-1°. Hexamethylene diamine was obtained in a 85% yield by the hydrogenation of adiponitrile at 85-90° under a pressure of 100 atmospheric with a volume rate of 0.3 over molten Co catalyst in a NH3 alc. solution The preparation of ethers was accomplished by the interaction of V or VI with the dry Na salts of the synthetic fatty acids containing 7-9 C atoms in a medium consisting of the same free acids at 180-90°, 14 hrs., by washing with acidified H2O, and distilling The action of alkali metal cyanide on VI at elevated temperature in an aqueous IV medium yielded 80% hydroxydivaleric acid (XXI) dinitrile, b5 175-80°, d20 0.963, n20D 1.4459. The alkaline saponification of XXI dinitrile yielded 77% XXI, m. 85-6°, and from XXI itself an ether b3 237-39°, d20 0.9353, n20D 1.4499, and saponification number 256, was obtained. The reduction of XXI dinitrile in an NH3-alc. solution at 100° over Raney Ni yielded 76% 5,5-di-(**aminoamyl**) ether, b. 135-7°, d20 0.9330, n20D 1.4627. VI heated with K phthalimide with the subsequent decomposition of the obtained product yielded 70% 4,4'-di(**aminobutyl**)ether, b9 125-6°, n20D 1.4568. VI treated with AcOK at 170-80° yielded 90% dibutyleneglycol(XXII) diacetate, b4 147-50°, d20 1.0253, n20D 1.4340, which reesterified with MeOH as above for XX yielded 92% XXII, b4 140-1°, d20 1.0041, n20D 1.4537. The substitution of one Cl in V by a cyano group in a solution of adiponitrile at 135-40° yielded 62% chlorovaleronitrile, b28 115-17°, d20 1.0536, n20D 1.4430, which treated with Na2S in an aqueous solution of IV at 115-20° yielded 70% thiodivaleric acid dinitrile (XXIII), b3 189-90°, d20 1.023, n20D 1.4868. The saponification of XXIII in an acid medium yielded 75% thiovaleric acid, m. 94-5°. The oxidation of III by HNO3 at below 25-30° yielded 90% succinic acid (XXIV), m. 183°. The oxidation under less severe conditions, e.g. in HNO3 (d. 1.34) at 20-8° in C6H6 yielded 37% butyrolactone (XXV), b. 198-20°, d20 1.298, n20D 1.4350, and XXIV. XXV was also obtained by the dehydrogenation of XX over Cu-Cr catalyst at 230-40° (yield: 95%). The characteristics of a number of complex esters obtained from the products of VII are given in the order: name of acid, name of alc., b.p., d20, n20D, saponification number, flash p., specific volume resistance (ohm/cm.), losses on heating 6 hrs. at 100 (%), stability to freezing of the poly(vinyl chloride) films in degrees: XXIV, 2-ethylhexyl alc. (XXVI), 176-8° (25), 0.930, 1.4420, 333, 186, 2.4 + 1010, 0.2, -25°; XXIV, alcs. with C12, 220-5°(2), 0.915, 1.4499, 256, 225, 3.2 + 1011, 0.25, -30°; glutaric acid, XXVI, -, 0.926, 1.4465, 320.7, 181, 4.7 + 10, -, -35°; adipic acid, XXVI, -, 0.924, 1.4467, 301.7, 197, 8.7 + 1010, 0.5, -45°; adipic acid, VIII, -, 1.121, 1.4710(25), 364, 199, 2.3 + 109, 0.41, -35°; XVIII, XXVI, -, 0.961, 1.4530, 385, 197, 7.3 + 1010, 0.35, -50°; sebacic acid, VIII, -, 1.067, 1.4680(25), 298, 218, 7.3 + 109, 0.15, -25°; phthalic acid, VIII, -, 1.205(25), 1.5230, 320, 210, 4.4 + 109, 0.23, -; XX, XXVI, 237-9(3), 0.935, 1.4499, 256, 225, 3.2 + 1011, 0.25, -30°; C7-C9 acids, XX, 200-35°(5), 0.925, 1.4449, 312, 197, 4.5 + 1011, 0.07, -58°; C7-C9 acids, XXII, 220-90°(5), 0.936, 1.4482, 283, 212, 4.5 + 1010, 0.016, -50°; oleic acid, VIII, 222-7°(2), 0.922(25), 1.4655(25), 147-55, 196, 2 + 1011, 0.35, -50°; **tetrahydrofurancarboxylic acid** (XXVII), XXVI, 117-20°(4), 0.9645, 1.4470, 244.2, -, -, -, -; XXVII, diethylene glycol, 216-18°(3), 1.1921, 1.4684, 376.6, -, -, -, -.

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=> d que stat l25
L1             1 SEA FILE=REGISTRY ABB=ON  "DIPERGLUTARIC ACID"/CN
L2             1 SEA FILE=REGISTRY ABB=ON  "DIPERADIPIC ACID"/CN
L3             1 SEA FILE=REGISTRY ABB=ON  "DIPERPIMELIC ACID"/CN
L4             1 SEA FILE=REGISTRY ABB=ON  "DIPERSEBACIC ACID"/CN
L5             1 SEA FILE=REGISTRY ABB=ON  "DIPERSUBERIC ACID"/CN
L6             1 SEA FILE=REGISTRY ABB=ON  "DIPERAZELAIC ACID"/CN
L7             1 SEA FILE=REGISTRY ABB=ON  "SODIUM SULFATE"/CN
L8             1 SEA FILE=REGISTRY ABB=ON  MAGNESIUM SULFATE/CN
L9             1 SEA FILE=HCAPLUS ABB=ON  ?EXOTHERMIC?(W)?CONTROL?(W)?AGENT?
L10      1422144 SEA FILE=HCAPLUS ABB=ON  ?SOLID?(W)?PARTICL? OR ?POWDER? OR
                 ?COLLOID? OR ?CRYSTALLIN? OR ?TABLET?
L11        47714 SEA FILE=HCAPLUS ABB=ON  L10 AND (?STABILIZ? OR ?SOLUBILIZ?)
L12            2 SEA FILE=HCAPLUS ABB=ON  L11 AND (L1 OR L2 OR L3 OR L4 OR L5
                 OR L6 OR (?DIPERGLUTARIC? OR ?DIPERADIPIC? OR ?DIPERPIMELIC?
                 OR ?DIPERSUBERIC? OR ?DIPERSEBACIC? OR ?DIPERAZELAIC?)(W)?ACID?
                 )
L13         4459 SEA FILE=HCAPLUS ABB=ON  L11 AND ((?ALKYL? OR ?CARBON?)(W)?CHAI
                 N? OR ?HYDROXYL? OR ?AMINO? OR ?AMIDO? OR ?ALKOXY? OR ?CARBONYL
                 ?)
L15           39 SEA FILE=HCAPLUS ABB=ON  L13 AND (?ALKALI? OR ?ALKALINE?)(W)?EA
                 RTH?
L16           89 SEA FILE=HCAPLUS ABB=ON  L13 AND ?METAL?(W)?SALTS?
L17          118 SEA FILE=HCAPLUS ABB=ON  L15 OR L16
L18            1 SEA FILE=HCAPLUS ABB=ON  L17 AND ?EXOTHERM?
L20           58 SEA FILE=HCAPLUS ABB=ON  L13 AND (L7 OR L8 OR ?MAGNESIUM?(W)?SU
                 LFAT? OR ?SODIUM?(W)?SULFAT?)
L21           99 SEA FILE=HCAPLUS ABB=ON  L9 OR L12 OR L15 OR L18 OR L20
L24           17 SEA L21
L25           16 DUP REMOV L24 (1 DUPLICATE REMOVED)

=> d ibib abs l25 1-16

L25  ANSWER 1 OF 16  JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER:    1040742492  JICST-EPlus
TITLE:               Interaction between Nanometer-sized Hydroxyapatite
                     Particles and Amino Acid
AUTHOR:              CHAEN M; HIRATA Y
CORPORATE SOURCE:    Kagoshima Univ., Kagoshima, Jpn
SOURCE:              Trans Mater Res Soc Jpn, (2004) vol. 29, no. 5, pp.
                     2379-2382. Journal Code: L4468A (Fig. 7, Tbl. 1, Ref. 17)
                     ISSN: 1382-3469
PUB. COUNTRY:        Japan
DOCUMENT TYPE:       Conference; Article
LANGUAGE:            English
STATUS:              New
AB   The particle of the hydroxyapatite was produced with the reaction of
     phosphoric acid with calcium hydroxide at room temperature, and the
     particle was filtered, washed with water, dried and thereafter calcined
     for 1h at 600.DEG.C., to obtain the powder of specific surface
     of 55m2/g. The suspension containing this powder in 2vol% was
     produced, the effect of the addition of each 0.5mass% of
     glycine,phenylalanine, leucine, glutamic acid, ricin on the zeta-potential
     and the dispersability of powder particle was examined by
     changing pH.In pH4 or less, the particle dissolved in the solution. At pH5
     to 9, the zeta-potential was the negative value, and phenylalanine,
     leucine and ricin move the zeta-potential in the positive direction, and
     the effect of glycine and glutamic acid was small. The dispersability of
     the particle was improved, when amino acid was added. It is
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considered that this is based on the steric **stabilization** effect. And, though the dispersability small in pH5-7 when **amino** acid is not added, it increased in pH9. This is due to the change of the zeta-potential.

L25 ANSWER 2 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 1030192321 JICST-EPlus
TITLE: Basic functions of copper/nickel-based **colloidal** catalyst for one-pot amination of fatty alcohols.
AUTHOR: KIMURA HIROSHI; ITAHASHI MASAKI
NOMURA SEIJI; HATTORI YASUYUKI; MATSUTANI KAZUTO; TSUTSUMI SHUN'ICHI; KAWAKAMI TAKAHIRO; HOSHINO FUMIRO
CORPORATE SOURCE: Kao Corp., JPN
Kao Corp., Kenkyu Gijutsu Kaihatsu Bumon
SOURCE: Shokubai (Catalysts & Catalysis), (2003) vol. 45, no. 2, pp. 169-171. Journal Code: F0319A (Fig. 5, Tbl. 2, Ref. 3)
CODEN: SHKUAJ; ISSN: 0559-8958
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: Japanese
STATUS: New
AB Cu/Ni-based **colloidal** catalyst, **stabilized** by barium stearate, catalysed one-pot amination of fatty alcohols with dimethylamine (DMA) to form the corresponding tertiary amines. The amination reaction proceeded via aldehyde mechanism with an yield of more than 90% without charging bulk hydrogen. Active hydrogen, required for the hydrogenolysis of a DMA-adduct of a generated aldehyde, was supplied by dehydrogenation over copper of a starting alcohol, and was used highly efficiently over nickel. Existence of the self-supplying system for active hydrogen and dual-function based on the combination of copper and nickel are the origin of the one-pot amination, which is completely different from conventional reductive amination of **carbonyl** compounds using molecular hydrogen. Addition of triphenylphosphite generated CO-resistance for the catalytic system. Incorporation of calcium stearate with Cu/Ni increased catalytic activity several times higher to perform the amination of lower reactive oxo-alcohols. (author abst.)

L25 ANSWER 3 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 1010059389 JICST-EPlus
TITLE: Hybrid Crystals of Calcium Carbonate and **Amino** Acids.
AUTHOR: KAI A; MIKI T
CORPORATE SOURCE: Yamaguchi Univ., Ube, Jpn
SOURCE: Jpn J Appl Phys Part 2, (2000) vol. 39, no. 10B, pp. L1071-L1073. Journal Code: F0599B (Fig. 3, Tbl. 1, Ref. 26)
ISSN: 0021-4922
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: English
STATUS: New
AB We have investigated the effects of **amino** acids on the crystallization of calcium carbonate (CaCO3), and the reactivity between **amino** acids and CaCO3. Noncharged-polar and acidic **amino** acids are highly incorporated into CaCO3 and **stabilize** cauliflower-like grains composed of vaterite which is thermodynamically unstable in the CaCO3 polymorphs. **Amino** acids in the hybrid CaCO3 form radicals different from those in **crystalline** **amino** acids by X-ray irradiation. The results imply that the hybrid carbonate can provide a reaction field for organic synthesis. We

also propose models for the bond between **amino** acids and CaCO3 using semiempirical approximation procedures. (author abst.)

L25 ANSWER 4 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 1000251012 JICST-EPlus
TITLE: Preventive Effect of Diethyldithiocarbamate on Opacification of Cultured Rat **Crystalline** Lenses.
AUTHOR: ITO YOSHIMASA; HONG C; NABEKURA TOMOHIRO
TERAO MOTOME
TOMOHIRO MASAYUKI
CORPORATE SOURCE: Kinki Univ., Fac. of Pharm. Sci.
Kinkidai Yakugakusoken
Farumashiavappujon
SOURCE: Atarashii Ganka (Journal of the Eye), (2000) vol. 17, no. 1, pp. 113-116. Journal Code: Y0754A (Fig. 2, Tbl. 2, Ref. 13)
CODEN: ATGAEX; ISSN: 0910-1810
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article
LANGUAGE: Japanese
STATUS: New
AB In this study we investigated the preventive effect of diethyldithiocarbamate(DDC) on selenite-induced opacification of cultured rat lenses. Lens opacity was induced by 24 hours incubation with 0.2mM sodium selenite, resulting in increased lens selenium content. Increase in selenium content and onset of opacification were inhibited by preincubation with DDC. The selenite resulted in a significant decrease in lens glutathione and protein thiol contents, and an increase in the lipid peroxide content. DDC protected Ca-ATPase activity and prevented the lens calcium level increase induced by selenite, suggesting that DDC may **stabilize** the lens membrane. These alterations were suppressed by DDC, suggesting that DDC has an antioxidative effect in the inhibition of lens opacification. (author abst.)

L25 ANSWER 5 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 991042662 JICST-EPlus
TITLE: Recent Advance in Magneto-Science. Magnetic Effect on the Interface between Aqueous Solution and Solid.
AUTHOR: HIGASHITANI KO; OSHITANI JUN
CORPORATE SOURCE: Kyoto Univ., Grad. Sch.
SOURCE: Hyomen Kagaku (Journal of the Surface Science Society of Japan), (1999) vol. 20, no. 11, pp. 764-769. Journal Code: F0940B (Fig. 9, Ref. 29)
ISSN: 0388-5321
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Commentary
LANGUAGE: Japanese
STATUS: New
AB Effects of magnetic exposure on aqueous systems have been investigated employing **colloidal** particles, an atomic force microscope (AFM), fluorescent probes and others. A series of quantitative and reproducible data on the magnetic effects has been obtained by well controlled experiments. The followings were found: (1) the magnetic exposure reduces the rapid coagulation rate, the zeta potential and diffusivity of **colloids**, (2) the exposure affects the formation of CaCO3 crystals, (3) the exposure thickens the adsorbed layer on the surface in electrolyte solution and reduces the potential of solid surface, which are clarified by AFM measurements, (4) the exposure increases the emission intensity of fluorescent probes with a long **carbon chain**

in solutions, (5) there exists a memory in the magnetic effects. It is postulated from these results that the magnetic effects are attributable to the **stabilization** of the water molecules adsorbed on the solid surface and those hydrated around structure-disordering ions. (author abst.)

L25 ANSWER 6 OF 16 MEDLINE on STN DUPLICATE 1
ACCESSION NUMBER: 97141589 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8987847
TITLE: Refolding, isolation and characterization of crystallizable human interferon-alpha 8 expression in Saccharomyces cerevisiae.
AUTHOR: Di Marco S; Fendrich G; Meyhack B; Grutter M G
CORPORATE SOURCE: Department of Core Drug Discovery Technology, Ciba-Geigy, Ltd., Basle, Switzerland.
SOURCE: Journal of biotechnology, (1996 Sep 13) 50 (1) 63-73. Journal code: 8411927. ISSN: 0168-1656.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Biotechnology
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970227
Last Updated on STN: 20000303
Entered Medline: 19970213

AB Human interferon-alpha 8 was expressed in Saccharomyces cerevisiae and found to accumulate intracellularly in an insoluble form. The protein could be **solubilized** and converted to a biologically active form with high yield by a denaturation-refolding procedure. The interferon-alpha 8 was further purified to apparent homogeneity by copper-chelate affinity chromatography and anion-exchange chromatography and fully characterized by **sodium dodecylsulfate** polyacrylamide gel electrophoresis (SDS-PAGE), N-terminal sequence analysis, mass spectrometry, circular-dichroism (CD) spectroscopy and specific activity. Secondary-structure predictions from CD spectroscopy indicate that the molecule is correctly folded. Peptide mapping supported the correct sequence and the expected disulfide-bridge connectivity. The purified protein elutes on reversed-phase high-pressure liquid chromatography (RP-HPLC) as two peaks. Electrospray mass spectrometry and N-terminal sequence analysis of the minor component indicated the existence of an N-terminal acetyl group for the later eluting HPLC-component. In anti-viral assays, the two IFN forms were equally active. Hexagonal crystals of this interferon preparation could be obtained. On the basis of the electrophoretic mobility, HPLC profile, and biological activity assay, the **crystalline** material was judged to be identical to the uncrystallized interferon. Interferon in crystallized form was found to be stable for up to 24 months and, therefore, could be used for long-term storage, particularly for material intended for clinical use.

L25 ANSWER 7 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 970026287 JICST-EPlus
TITLE: Research on fine particles adsorption **stabilization** in aqueous pigment dispersion.
AUTHOR: HOKARI NORIKO; HIWARA ATSUNAO; FUJITANI TOSHIHIDE
CORPORATE SOURCE: Kansai Paint Co., Ltd., Tech. Res. Lab.
SOURCE: Shikizai Kenkyu Happyokai Koen Yoshishu, (1996) vol. 1996, pp. 44-45. Journal Code: L2123A (Fig. 2)
PUB. COUNTRY: Japan

DOCUMENT TYPE: Conference; Article
LANGUAGE: Japanese
STATUS: New
AB The despersion of various particles in the paint (pigment, acrylic resin emulsion, melamine dispersion) and their interactions were evaluated based on surface characteristcis of the pigment.The steric hindrance and electrostatic effects were added to the pigment by adsorbing the ultrafine particles of resin, barium sulfate and silica to the pigment.The dispersion stability of various particles was thus improved.

L25 ANSWER 8 OF 16 JAPIO (C) 2005 JPO on STN
ACCESSION NUMBER: 1994-295007 JAPIO
TITLE: SILVER HALIDE PHOTOGRAPHIC ELEMENT
INVENTOR: TAKAMUKAI YASUHIKO; HANIYU TAKESHI
PATENT ASSIGNEE(S): KONICA CORP
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 06295007	A	19941021	Heisei	G03C001-04

APPLICATION INFORMATION
STN FORMAT: JP 1993-80820 19930407
ORIGINAL: JP05080820 Heisei
PRIORITY APPLN. INFO.: JP 1993-80820 19930407
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1994
AN 1994-295007 JAPIO
AB PURPOSE: To obtain a new photographic element in which silver halide particles having high sensitivity and low fog are used so that the element has excellent pressure resistance and scratching resistance and causes no sticking nor deterioration of surface electrification characteristics.
CONSTITUTION: This photographic element has at least one silver halide emulsion layer and a nonphotosensitive hydrophilic **colloid** layer on both surfaces of the supporting body. At least one layer of the photographic element contains planer silver halide particles having >=3 aspect ratio and a latex containing a compound having the repeating structural unit expressed by formula as a dispersion **stabilizer.**
In formula, R<SB>1</SB>-R<SB>6</SB> are hydrogen atoms, alkyl groups of 1-8 carbon number, aryl groups of 6-20 carbon number or-SO<SB>3</SB>X wherein X is a hydrogen atom, alkali metal atom, **alkaline earth** metal atom, ammonium group or **amino** group, and at least one of R<SB>1</SB>-R<SB>6</SB> is-SO<SB>3</SB>X.
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L25 ANSWER 9 OF 16 JAPIO (C) 2005 JPO on STN
ACCESSION NUMBER: 1991-215599 JAPIO
TITLE: BLEACHING DETERGENT COMPOSITION
INVENTOR: KURODA MUTSUMI; ARAKI HIROYUKI; OTSUKA HIROSHI; TAGUCHI AKIO
PATENT ASSIGNEE(S): KAO CORP
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 03215599	A	19910920	Heisei	C11D003-395

APPLICATION INFORMATION
STN FORMAT: JP 1990-10114 19900119

ORIGINAL: JP02010114 Heisei
PRIORITY APPLN. INFO.: JP 1990-10114 19900119
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1991

AN 1991-215599 JAPIO
AB PURPOSE: To improve a bleaching and cleaning effect by incorporating a nonionic surfactant, a zeolite, a peroxide, an organic peroxy acid precursor and a specified copolymer.
CONSTITUTION: A bleaching detergent compsn. comprising 8-35wt.% (hereinbelow described as %) nonionic surfactant (A) (e.g. a polyoxyethylene alkyl ether with an alkyl group of a mean carbon number of 10-20 and 1-30mol of ethylene oxide added thereto), 20-60% synthetic **crystalline** zeolite (B), 5-20% peroxide (C) generating H<SB>2</SB>O<SB>2</SB> in a water-soluble solution (e.g. sodium perborate hydrate), 1-10% organic peroxy acid precursor (D) reacting with H<SB>2</SB>O<SB>2</SB> of formula I, II, etc., to give an organic peroxy acid having a group of formula III, 1-5% copolymer (E) with the units of formula IV [wherein M is H, alkali (**alkaline earth**) metal, a (substd.) ammonium] in the molecule and an average mol.weight of 800-1,000,000 (e.g. a maleic acid-acrylic acid copolymer) and 0.5-2% bleaching **stabilizer** (F) [e.g. **aminotri** (methylene)phosphonic acid] and which does not contain 0.1% or more phosphate.
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L25 ANSWER 10 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 880482233 JICST-EPlus
TITLE: Future prospects of natural colorants. Techniques for inclusion of natural colorants by cyclodextrin and its performance.
AUTHOR: HARA KOZO
CORPORATE SOURCE: Ensuiko Sugar Refining Co., Ltd.
SOURCE: Gekkan Fudo Kemikaru (Technical Journal on Food Chemistry & Chemicals), (1988) vol. 4, no. 7, pp. 66-73. Journal Code: X0600A (Fig. 11, Tbl. 6, Ref. 13)
ISSN: 0911-2286
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Commentary
LANGUAGE: Japanese
STATUS: New

L25 ANSWER 11 OF 16 JICST-EPlus COPYRIGHT 2005 JST on STN
ACCESSION NUMBER: 880009707 JICST-EPlus
TITLE: **Solubilization** of chlorophyll a-dioxane complex in water by polyvinyl alcohol.
AUTHOR: INAMURA I
CORPORATE SOURCE: Shimane Univ., Matsue, JPN
SOURCE: Chem Lett, (1987) no. 8, pp. 1607-1610. Journal Code: S0742A (Fig. 2, Ref. 10)
CODEN: CMLTAG; ISSN: 0366-7022
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Short Communication
LANGUAGE: English
STATUS: New
AB The chlorophyll a (Chl a)-dioxane complex was **solubilized** in water by binding to polyvinyl alcohol (PVA), which resulted in Chl a-dioxane-PVA **colloid.** The absorption and fluorescence spectra of the aqueous solution of the Chl a-dioxane-PVA **colloid** were obtained. They were compared with the spectra of the Chl a in an aqueous

dioxane (35%) solution and the Chl a-PVA complex in water.(author abst.)

L25 ANSWER 12 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1983:288412 BIOSIS
DOCUMENT NUMBER: PREV198376045904; BA76:45904
TITLE: SUBSTRATE SPECIFICITY OF A HEMORRHAGIC PROTEINASE EC-3.4.24.4 FROM TIMBER RATTLESNAKE CROTALUS-HORRIDUS-HORRIDUS VENOM.
AUTHOR(S): CIVELLO D J [Reprint author]; MORAN J B; GEREN C R
CORPORATE SOURCE: DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ARKANSAS, FAYETTEVILLE, ARKANSAS 72701, USA
SOURCE: Biochemistry, (1983) Vol. 22, No. 4, pp. 755-762. CODEN: BICHAW. ISSN: 0006-2960.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The substrate specificity of hemorrhagic proteinase 4 (HP-4) from timber rattlesnake (C. horridus horridus) venom was investigated. HP-4 exhibited little activity toward most protein substrates but totally **solubilized** cow hide **powder** azure. HP-4 also catalyzed the hydrolysis of cow hide **powder** that did not contain covalently bound dye. Dansylation of the hydrolysis fragments of cow hide showed the formation of 6 new N-terminal residues. Only 1 peptide bond was cleaved in each oxidized A and B chain of insulin. Bee venom melittin was cleaved at the Ile2.sbd.Gly3, Pro14.sbd.Ala15 and Ser18.sbd.Trp19 bonds. Various unblocked dipeptides and the doubly blocked dipeptides N-Cbz-Ser-Leu-NH2, N-Cbz-Ala-Leu-NH2 and N-Cbz-Ile-Gly-NH2 were not cleaved. The peptides corresponded to known cleavage sites in the insulin chains and melittin. HP-4 also had no esterase, elastase or phospholipase activity under these assay conditions but did exhibit a weak collagenase activity. HP-4 catalyzed the complete hydrolysis of glomerular basement membrane in the presence of 10 mM Ca2+ at a rate 60% as fast as an equal concentration (by weight) of bacterial collagenase. When incubated with fibrinogen solutions, HP-4 caused a 50% decrease in soluble protein. Coincident with the decrease in soluble protein was the formation of a precipitate in which the α and β chains of fibrinogen had been degraded. **Sodium dodecylsulfate**/polyacrylamide gel electrophoresis revealed that fibrinogen with degraded α and β chains was present in the supernatant after the formation of the precipitate. High-pressure liquid chromatography analysis of HP-4-treated fibrinogen revealed the release of a peptide similar in composition to thrombin-induced fibrinopeptide A, but no peptide corresponding to fibrinopeptide B was detected. Incubation of HP-4 with thrombin-induced fibrin clots caused an increase in soluble protein with electrophoretic patterns showing degradation of the α chain. Results obtained from the hydrolysis of the various substrates by HP-4 suggested that cleavage points were determined by the size and conformation of the substrate, not just by recognition of the **amino** acids comprising the cleaved peptide bond.

L25 ANSWER 13 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1983:279155 BIOSIS
DOCUMENT NUMBER: PREV198376036647; BA76:36647
TITLE: **STABILIZATION** OF THE TERNARY COMPLEX ELONGATION FACTOR TU GTP VALYL TRANSFER RNA.
AUTHOR(S): ANTONSSON B [Reprint author]; LEBERMAN R
CORPORATE SOURCE: EUROPEAN MOLECULAR BIOL LAB, C/O INST LAUE LANGEVIN, BP 156

X, 38042 GRENOBLE CEDEX, FR
SOURCE: Biochimie (Paris), (1982) Vol. 64, No. 11-12, pp. 1035-1040.
CODEN: BICMBE. ISSN: 0300-9084.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB In a search for crystallizing conditions for the ternary complex EF[elongation factor]-Tu·GTP·valyl-tRNAvaL [from Escherichia coli], the influence of various salts on its stability was examined by measuring the rate of deacylation of the **aminoacyl**-tRNA in the complex. The most striking result is the general higher stability in solutions of ammonium salts and, in particular, the enhancement of this effect by sulfate and citrate. **Sodium sulfate** and citrate lead to **destabilization** of the complex, as expected from conventional considerations of adding salt, whereas the corresponding ammonium salts **stabilize** the complex as shown, for example, by an increase in the half-life of the valyl-tRNAval in the complex from .apprx. 20 h to at least 300 h in the presence of 1.2 M ammonium sulfate. Ammonium sulfate and ammonium citrate might be very suitable precipitants for **crystallinization** studies of the ternary complex.

L25 ANSWER 14 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:180880 BIOSIS
DOCUMENT NUMBER: PREV197865067880; BA65:67880
TITLE: CHANGES IN THE DISTRIBUTION OF PROTEINS IN THE AGING HUMAN LENS.
AUTHOR(S): COGHLAN S D [Reprint author]; AUGUSTEYN R C
CORPORATE SOURCE: RUSSELL GRIMWADE SCH BIOCHEM, UNIV MELB, PARKVILLE, VICTORIA 3052, AUST
SOURCE: Experimental Eye Research, (1977) Vol. 25, No. 6, pp. 603-612.
CODEN: EXERA6. ISSN: 0014-4835.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB The rate of extraction of lens proteins varied with age. A method involving exhaustive extraction of the lens, at room temperature, was used to separate the lens proteins into water-soluble, urea-soluble, **solubilized** urea-insoluble and insoluble proteins. In 28 normal lenses of ages from 0-90 yr, the level of water-soluble proteins decreased linearly from over 96% of the total lens proteins at birth to about 89% at age 90. The urea-soluble proteins increased from 2% to about 10% while the levels of the **solubilized** urea-soluble and insoluble proteins remained constant at 1.3 and 0.2%, respectively. The water-soluble proteins were fractionated on DEAE-cellulose scaled down so that as litte as 500 μg of protein could be fractionated. The proteins so obtained were characterized by **amino** acid analysis, isoelectric focusing and SDS [**sodium dodecylsulfate**] gel electrophoresis. The levels of all the soluble **crystallin** in the lens decreased linearly with age while the protein eluted with NaOH increased. This fraction most closely resembled the α-**crystallins.** Large changes were found in the **amino** acid compositions of the α- **crystallins** while the compositions of the other fractions appeared to remain unchanged. The reasons for the differences between some of the results presented in this paper and those published by other workers were discussed.

L25 ANSWER 15 OF 16 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
ACCESSION NUMBER: 1978:173935 BIOSIS
DOCUMENT NUMBER: PREV197865060935; BA65:60935
TITLE: KINETIC PROPERTIES OF SUBTILISIN TYPE CARLSBERG IN THE **CRYSTALLINE** STATE.
AUTHOR(S): TUCHSEN E [Reprint author]; OTTESEN M
CORPORATE SOURCE: DEP CHEM, CARLSBERG LAB, GAMLE CARLSBERG VEJ 10, DK-2500 COPENHAGEN, DEN
SOURCE: Carlsberg Research Communications, (1977) Vol. 42, No. 5, pp. 407-420.
CODEN: CRCODS. ISSN: 0105-1938.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Crystals of subtilisin Carlsberg were **insolubilized** by cross-linking with glutaraldehyde in **sodium sulfate** solutions at pH 5.5. Depending upon the reaction time, 3-6 of the 9 lysyl residues were modified while none of the other **amino** acids appeared to be involved. The **insolubilized** crystals were highly active and the kinetic constants for the hydrolysis of N-trans-cinnamoylimidazole and tosylarginine methyl ester were changed only moderately, suggesting the conformations of subtilisin in the **crystalline** and solution to be very similar. The activity towards casein was low, indicating that this high MW substrate was unable to penetrate into the interior of the crystals. Compared with the dissolved enzyme, the cross-linked crystals autolyzed at much lower rates, had increased thermal stability, were slightly more stable in acid solutions, and had unchanged stability in alkaline solutions. Although kinetic control experiments in unbuffered solutions indicated the absence of diffusional restrictions with respect to small synthetic substrates, the diffusion of OH- into the crystal matrix was insufficient to prevent a pH decrease within the crystals due to the protons being released by the hydrolysis of the substrates. The addition of buffers in low concentrations essentially eliminated this pH difference by accelerating the transport of protons.

L25 ANSWER 16 OF 16 JAPIO (C) 2005 JPO on STN
ACCESSION NUMBER: 2004-035607 JAPIO
TITLE: ORGANOSILOXANE RESIN COMPOSITION AND POLYCARBONATE RESIN MOLDED PRODUCT HAVING PROTECTED SURFACE
INVENTOR: EKINAKA TATSUYA; IMANAKA YOSHIHIKO; KAJIWARA TOSHINORI
PATENT ASSIGNEE(S): TEIJIN CHEM LTD
PATENT INFORMATION:

PATENT NO	KIND	DATE	ERA	MAIN IPC
JP 2004035607	A	20040205	Heisei	C08L083-04

APPLICATION INFORMATION
STN FORMAT: JP 2002-190919 20020628
ORIGINAL: JP2002190919 Heisei
PRIORITY APPLN. INFO.: JP 2002-190919 20020628
SOURCE: PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2004
AN 2004-035607 JAPIO
AB PROBLEM TO BE SOLVED: To provide a coating composition for a coating having an excellent appearance, transparency, scratch resistance, hardness, hot water resistance, adhesion, organic solvent resistance, acid

resistance, especially abrasion resistance and preservation stability, and to provide a polycarbonate resin molded product having a surface protected with the composition.
SOLUTION: An organosiloxane resin composition is composed of (A) a **colloidal** silica (component a), (B) a hydrolyzate condensate of an **alkoxysilane** (component b), (C) a curing catalyst, (D) a preservation **stabilizer** and (E) a solvent. The curing catalyst (C) is an alkali metal salt, an **alkaline earth** metal salt or a quaternary ammonium salt of an organic carboxylic acid and the preservation **stabilizer** is an amine compound or a metal chelating compound. The polycarbonate resin molded product is obtained by protecting the surface with the resin composition.

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L4 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:595512 HCAPLUS
DOCUMENT NUMBER: 137:145669
TITLE: Methods of sterilizing with dipercarboxylic acids
INVENTOR(S): **Singh, Waheguru Pal; Giletto, Anthony; Hitchens, G. Duncan**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002107288	A1	20020808	US 2000-733611	20001208
US 2002188026	A1	20021212	US 2001-52908	20011029
PRIORITY APPLN. INFO.:			US 2000-733611	A3 20001208

AB Dry dipercarboxylic acid material and methods of using dry dipercarboxylic acid particulates to form novel sterilizing solns. or liquid chemical germicides. The dipercarboxylic acids or organic diperoxygen compds. can be synthesized and isolated as solid powders with an extended shelf life. The powders are also soluble in water for quickly preparing liquid disinfectant solns., whenever and wherever desired, from a potable water source. The dry dipercarboxylic acid materials are selected from diperglutaric acid, diperadipic acid, diperpimelic acid, dipersuberic acid, and diperazelaic acid. Upon dissoln. into water, these compds. have demonstrated the ability to inactivate high nos. of spores, including sterilization of medical equipment in 10 min at room temperature The average dim. of zone of inhibition of diperglutaric acid at a concentration of 0.33% against Staphylococcus aureus, Pseudomonas aeruginosa, and Escherichia coli was 10 mm, while glutaric acid at 1% had no zone of inhibition.

IC ICM A61K031-19
NCL 514557000
CC 63-8 (Pharmaceuticals)
Section cross-reference(s): 23
ST sterilization dipercarboxylic acid germicides
IT Quaternary ammonium compounds, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aliphatic long chain; methods of sterilizing with dipercarboxylic acids)
IT Fatty acids, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(aliphatic; methods of sterilizing with dipercarboxylic acids)
IT Alkali metal salts
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hydrated; methods of sterilizing with dipercarboxylic acids)
IT Disinfectants
Solubilizers
Sporicides
(methods of sterilizing with dipercarboxylic acids)
IT Alkaline earth salts
Salts, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses)
(methods of sterilizing with dipercarboxylic acids)

IT Carboxylic acids, biological studies
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(peroxy, di-; methods of sterilizing with dipercarboxylic acids)

IT 7487-88-9, Magnesium sulfate, biological studies 7757-82-6, Sodium sulfate, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods of sterilizing with dipercarboxylic acids)

IT 1941-79-3P, Diperazelaic acid 2455-27-8P, Diperpimelic acid 5824-51-1P, Diperadipic acid 28317-46-6P, Diperglutaric acid 28317-47-7P, Dipersuberic acid
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(methods of sterilizing with dipercarboxylic acids)

IT 64-17-5, Ethanol, uses
RL: NUU (Other use, unclassified); USES (Uses)
(methods of sterilizing with dipercarboxylic acids)

IT 7722-84-1, Hydrogen peroxide., reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(methods of sterilizing with dipercarboxylic acids)